Graphing Parabola’s WS Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per \_\_\_\_\_\_

***Do all work on a different piece of paper for credit.***

Graph the parabola’s on graph paper, labeling all of the important information: vertex, focus, directrix and LR points.

1. 2. 3. 4.

State what type of conic is given from general form and then convert it to standard form. Then identify for Parabolas: vertex, focus, directrix and LR points

Circle: center and radius

Ellipse: center, foci, vertices, and co-vertices

Hyperbola: center, foci, vertices and asymptotes

5. 3x2 + 3y2 – 6x+12y-15=0 6. 9x2-4y2-36x+ 8y – 4 = 0

7. 4x2 + y2-32x + 16y + 124=0 8. y2-2y+4x-7=0

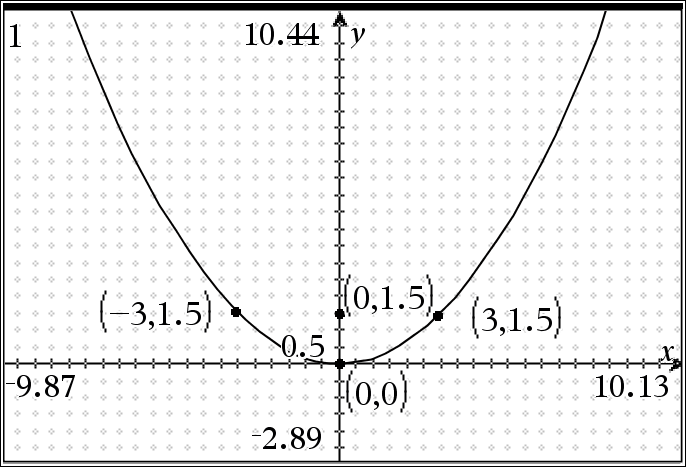
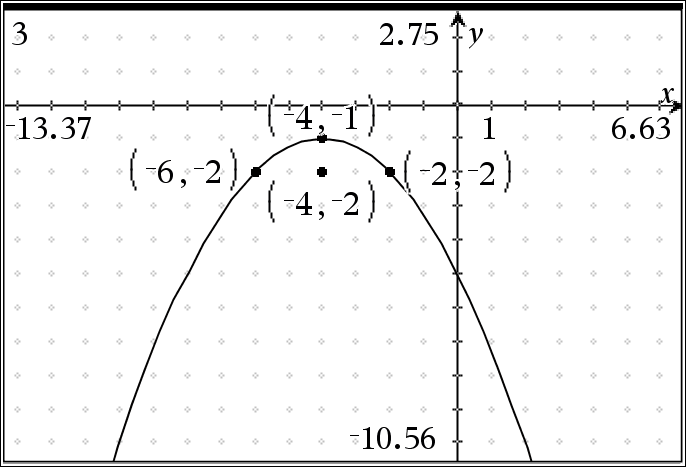
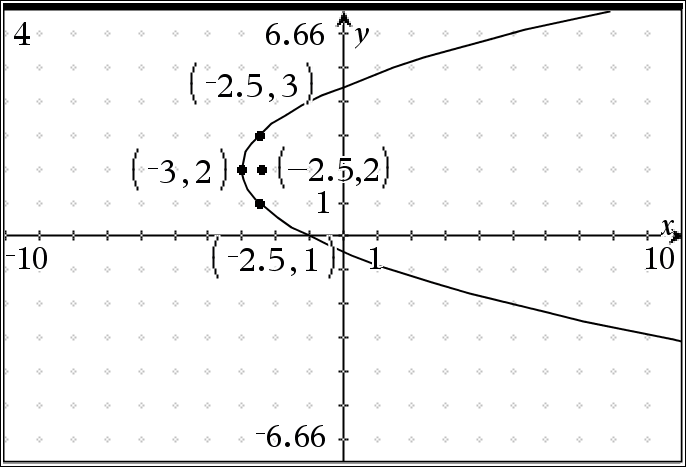
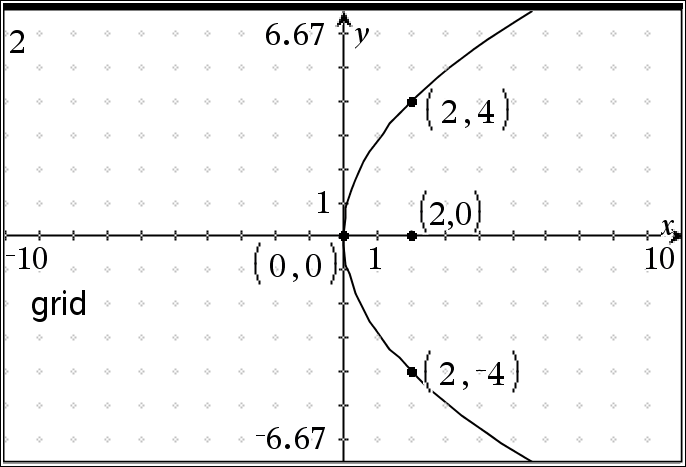
Find the standard form of each conic with the given information.

9. Ellipse: Minor axis endpoints (±12,0), major axis length 26.

10. Circle: Endpoints of the diameter are (-10, 3) and (4, -1).

11. Hyperbola: Foci (-3, -12) and (-3,0) and vertices (-3,-8) and (-3,-4).

12. Parabola: Vertex (-4,-4) and focus (-2,-4).



5. circle, (x-1)2+(y+2)2=10, (1,-2),

6. hyperbola, , (2,1), (2±, (0,1) and (4,1), y=±

7. ellipse, , (4,-8), (4, -8±, (4,-6) and (4, -10), (3, -8) and (5, -8)

8. parabola, (y-1)2=-4(x-2), (2,1), (1,1), x=3, (1,3) and (1, -1)

9. 10. (x+3)2+(y-1)2=53 11. 12. (y+4)2=8(x+4)